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EXAMINER	
DOLE, TIMOTHY J	
ART UNIT	**PAPER NUMBER**
2858	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/917,453	Applicant(s) TAYLOR ET AL.	
	Examiner Timothy J. Dole	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 28 July 2003 .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-16 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 27 July 2001 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Objections

1. Claims 15 and 16 are objected to because of the following informalities: claim 15 recites the limitations "the raw flight-time" in lines 11-12 and 15, "the raw wait-time" in lines 13-14 and 16, "the true flight-time" in lines 14 and 16, "the true wait-time" in lines 15 and 16, "the total true flight-time" in lines 16-17, and "the total true wait-time" in line 17. There is insufficient antecedent basis for these limitations in the claim. Claim 16 recites the limitations "the raw wait-time" in line 28, "the corrected average flight-time" in lines 31-32, 37 and 40, "the average wait-time" in lines 35 and 39, "the average wait-time count generator" in lines 35-36, and "the true count" in line 45. There is insufficient antecedent basis for these limitations in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. In view of the claim objections given above, the following rejections are based on the best meaning that the Examiner is able to assign the claims.

4. Claim 15 is rejected under 35 U.S.C. 102(b) as being anticipated by Farrell et al.

Farrell discloses a method for determining the actual number of particles in a sample containing a plurality of particles of varying sizes; comprising the steps of: passing the particles sequentially through a raw counting device (fig. 1 (10)) which produces an analog voltage signal (fig. 3 (S'); converting said analog voltage signal to a digital signal comprising a plurality of series of voltage pulses (fig. 3 (T_L)) wherein each pulse is caused by the passage of one or more particles through the raw counting device; wherein each series has a beginning and an end wherein the time difference between said beginning and said end is defined as the duration of each series wherein the sum of the duration of all series is defined as a raw flight-time and wherein the time between series is defined as a raw wait-time (fig. 3); converting the raw flight-time to a true flight-time (fig.3 (D_T)); converting the raw wait-time to a true wait-time (fig.3 (CP)-(D_T)); and employing the true flight-time and the true wait-time to calculate a total true flight time (DWT) and a total true wait-time (IT-DWT) to calculate the actual number (P) of particles in a sample. It should be noted that (S'), as shown in figure 3, is being evaluated with respect to voltage levels and therefore is considered to be a voltage signal. Also, (D_T) is a true flight time since it represents clock pulses during the time when the input signal is above a low voltage level. Therefore, the true flight time pulses can be subtracted from the total number of clock pulses, CP, and the result will be the amount of time that the input signal is below the low threshold level, or the true wait time.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4, 8-10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gohde et al. in view of Farrell et al.

Referring to claim 1, Gohde et al. discloses a method of counting particles, comprising the steps of: successively passing multiple particles through a particle sensing zone in the form of an orifice through which an electric current is flowing (column 7, lines 27-28 and column 8, lines 22-27); introducing a first electrical signal into the particle sensing zone for a period of time (column 3, lines 29-36); measuring a second electrical signal emanating from the particle sensing zone (column 3, lines 36-45) said second electrical signal being caused by modulation of said first electrical signal by said particles passing through said particle sensing zone; generating raw data using said second electrical signal, said raw data correlating to a raw count of particles passing through said particle sensing zone, a wait time count and a size of each particle (column 8, lines 1-3). It should be noted that while most of the specification of Gohde et al. discloses using the system wherein light is passed through the physically defined zone, the system also functions wherein a capacitance or resistivity sensor is used (column 8, lines 22-27) whereby an electrical current would be passed through the sensing zone.

Gohde et al. does not disclose a method of processing the raw data by using a true average flight time and a true average wait time to obtain a corrected count of particles.

Farrell et al. discloses a method of processing the raw data by using a true average flight time and a true average wait time to obtain a corrected count of particles (column 4,

lines 10-18). It should be noted that Farrell et al. uses the term (DWT/IT), where DWT is the total time during which the signal pulses are above a low threshold detection level (column 3, lines 43-45) and IT is the total interrogation time during which the detector is on (column 3, lines 45 and 46). Therefore the division of DWT by IT results in an average flight time and subtracting the term from 1 will result in an average wait time, the average being an average of 1. Since these terms are accurate measurements they are considered to be the true average flight times and true average wait times.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the flight time and wait time of Farrell et al. into the method of Gohde et al. for the purpose of improving the accuracy of the data when there is coincidence between the particles being counted as stated by Farrell et al. (column 4, lines 6-10).

Referring to claim 2, Gohde et al. discloses that the particles are biological particles (column 7, line 25).

Referring to claim 3, Gohde et al. discloses that the particles are blood cells (column 8, line15).

Referring to claim 4, Gohde et al discloses that the particles comprise white blood cells (column 5, lines 2-5).

Referring to claim 8, Gohde et al. discloses the method as claimed except for the true average flight time corresponding to a true average flight time that the second signal is above a threshold.

Farrell et al. discloses a method where the true average flight time corresponds to a true average flight time (Fig. 3, T_L) that the second signal is above a threshold (Fig. 3, V_L). It should be noted that T_L is logically ANDed with a clock pulse and the resulting signal enters a counter which counts the clock pulses and outputs a signal, DWT, which is divided by total time, IT, to produce a true average flight time.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the true average flight time that a signal is above a threshold of Farrell et al. in the method of Gohde et al. for the purpose of improving coincidence correction since the threshold can be set at different levels so that particles that are too small to be counted are ignored.

Referring to claim 9, Gohde et al. discloses the method as claimed except for the true average wait time corresponding to a true average time that particles are absent from the sensing zone.

Farrell et al. discloses a method where the true average wait time corresponds to a true average time that particles are absent from the sensing zone (column 4, lines 10-18). It should be noted that Farrell et al. uses the term (DWT/IT), where DWT is the total time during which the signal pulses are above a low threshold detection level (column 3, lines 43-45) and IT is the total interrogation time during which the detector is on (column 3, lines 45 and 46). Therefore the division of DWT by IT results in an average flight time and subtracting the term from 1 will result in an average wait time that particles are absent from the sensing zone.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the true average time that particles are absent from the sensing zone of Farrell et al. in the method of Gohde et al. for the purpose of improving coincidence correction as shown by standard equations 1 and 2 in Farrell et al. (column 3, lines 30-42).

Referring to claim 10, Gohde et al. discloses the method as claimed except for using an average period correction method calculation and an enhanced coincidence correction calculation to correct data to account for particle size variability in the sample.

Farrell et al. discloses an average period correction method calculation (column 5, line 63 – column 6, line 3) and an enhanced coincidence correction calculation (column 4, lines 10-18) to correct data to account for particle size variability in the sample.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the average period method calculation and enhanced coincidence correction calculation of Farrell et al. in the method of Gohde et al. for the purpose of correcting data to account for particle size variability since it is known by Gohde et al. that signal amplitudes whose values differ by more than a statistical fluctuation must derive from coincidence (column 4, lines 36-39).

Referring to claim 14, Gohde et al. discloses a method of counting particles, comprising the steps of: passing multiple particles through a particle sensing zone (claim 1); introducing a first signal into the particle sensing zone for a period of time (column 3, lines 29-36); measuring a second signal emanating from the particle sensing zone (column 3, lines 36-45); generating raw data using the second signal, where the raw data

correlates to a raw count of particles passing through the sensing zone, a wait time count and a size of each particle (column 8, lines 1-3).

Gohde et al. does not disclose a method of coincidence correction by processing the raw data by using a true average flight time.

Farrell et al. discloses a method of processing the raw data by using a true average flight time to obtain a corrected count of particles (column 4, lines 10-18). It should be noted that Farrell et al. uses the term (DWT/IT), where DWT is the total time during which the signal pulses are above a low threshold detection level (column 3, lines 43-45) and IT is the total interrogation time during which the detector is on (column 3, lines 45 and 46). Therefore the division of DWT by IT results in an average flight time.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the flight time and wait time of Farrell et al. into the method of Gohde et al. for the same purpose as given in claim 1, above.

7. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gohde et al. in view of Farrell et al. as applied to claim 1 above, and further in view of Carasso et al.

Referring to claim 5, the modified teaching of Gohde et al. discloses the method as claimed except for a sample containing multiple particles of sizes varying by more that 50%.

Carasso et al. discloses a sample containing multiple particles of sizes varying by more that 50% (column 12, lines 47 and 48). It should be noted that Carasso et al. states that the particles range in diameter from about 1 nm to about 1000 μm, which corresponds to a variance greater than 50 %.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the large variance in particle size of Carasso et al. in the method of Gohde et al. as modified for the purpose of maximizing particle flow while minimizing the probability that a particle will clog the sensing zone.

Referring to claim 6, Gohde et al. as modified discloses the method as claimed except for a sample that has a particle concentration so high that the average time between particles is less than the flight time.

Carasso et al. discloses a sample that has a particle concentration so high that the average time between particles is less than the flight time (column 12, lines 52 and 53). It should be noted that Carasso et al. states that the particles are present in an amount where the upper limit is 60% of the volume. Therefore, if the particle concentration were 60% particles, on average there would be a particle in the sensing zone contributing to the flight time 60% of the time, which would cause to the average time between particles to be 40%.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the particle concentration limits of Carasso et al. in the method of Gohde et al. as modified for the purpose of reducing the amount that a sample would need to be diluted, which would reduce the overall volume of the sample, which would reduce the time it would take to test the sample.

Referring to claim 7, Gohde et al. as modified discloses the method as claimed except for a particle sample, which is expected to have a particle density variability of greater than 50 fold between various samples.

Carasso et al. discloses a particle sample, which is expected to have a particle density variability of greater than 50 fold between various samples (column 12, lines 52 and 53). It should be noted that Carasso et al. states that the particles are present in an amount ranging form .1 to 60 % of the volume, which is greater than 50 fold.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the particle density variability of Carasso et al. in the method of Gohde et al. as modified for the same purpose as given in claim 6, above.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Graham et al. in view of Farrell et al.

Graham et al. discloses an apparatus for counting particles in a sample, comprising: one or more particle sensors, each sensor having a sensing zone (column 30, lines 18-25); a particle delivery unit for delivering particles to at least one of the particle sensing zones, where particles pass through at least one sensing zone (column 30, lines 18-27); and a particle measuring unit (column 30, lines 18-47) for determining the size of particles passing through at least one of the sensing zones, where the sensor generates a particle size signal (Fig 2. (21)), and for determining the number of particles that pass through at least one of the sensing zones in a given time period, where the particle sensor generates a particle number signal (Fig 2. (counter)).

Graham et al. does not disclose a device for calculating the average flight time of the particles in the sample based on the particle size signal and the particle number signal; or a correcting unit for correcting an apparent particle count to an adjusted particle

count by adding a true average flight time to a true average wait time to obtain a corrected count of particles.

Farrell et al. discloses a device for calculating the average flight time of the particles in the sample based on the particle size signal and the particle number signal; and a correcting unit for correcting an apparent particle count to an adjusted particle count by adding a true average flight time to a true average wait time to obtain a corrected count of particles (column 8, lines 20-52). It should be noted that as stated above, the average flight time is calculated by DWT/IT and this term is subtracted from one to obtain the average wait time, therefore, the formula: wait time = 1 - DWT/IT, is simply a mathematical manipulation of the adding of the average flight time to the average wait time.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the calculating and correcting apparatus of Farrell et al. into the apparatus of Graham et al. for the purpose of obtaining a more accurate count of particles since it is stated by Graham et al., that pulse editing circuitry responsive to particle coincidence may be desired (column 9, lines 47-50).

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gear in view of Jones, Jr.

Referring to claim 12, Gear discloses an apparatus for counting particles, comprising: a chamber having an inlet (Fig. 1 (42)), an outlet (Fig. 1 (54)) and a particle sensing zone (Fig. 1 (44)) located between the inlet and the outlet; a pump (Fig. 3 (56)) for passing a fluid containing particles into the inlet through the sensing zone and out of

the outlet; an electric source (Fig. 1 (50)) arranged to pass an electric current through the particle sensing zone; an electric current detector (Fig. 1 (52)) for measuring electric current as particles pass through the particle sensing zone, the detector generating raw data indicative of the number of particles passing through the particle sensing zone and indicative of the size of particles passing through the sensing zone.

Gear does not disclose a program for processing raw data from the detector, the program having the capability to add true average flight time to average wait time to give a true average period value.

Jones, Jr. discloses a program for processing raw data from the detector (column 5, lines 27-43), the program having the capability to add true average flight time to average wait time to give a true average period value.

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the program of Jones, Jr. into the apparatus of Gear for the purpose of determining a true average period value since it is stated by Gear that average platelet volume was routinely measured (column 7, lines 26-30).

Referring to claim 13, Gear discloses the apparatus as claimed except for the program using an average period correction method and an enhanced correction calculation to correct raw data obtained from the detector to account for particle size variability in the sample.

Jones, Jr. discloses a program using an average period correction method and an enhanced correction calculation to correct raw data obtained from the detector to account for particle size variability in the sample (column 5, lines 44-58).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the program of Jones, Jr. into the apparatus of Gear for the same purpose as given in claim 10, above.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell in view of Berg et al.

Farrell discloses an apparatus for determining the actual number of particles in a sample containing a plurality of particles of varying size, said apparatus comprising: a particle counting device (fig. 1 (10)) which produces a weak analog signal being a series of low voltage pulses wherein the duration of each single pulse is proportional to the time taken for one or more particle to pass through the counter; a preamp (fig. 1 (14)) which receives said weak analog signal from the particle counting device, amplifies the weak analog signal and produces a voltage signal (fig. 1 (S')); a comparator (fig. 1 (18)) which receives said voltage signal from the preamp and compares said voltage signal with a predetermined voltage threshold (fig. 1 (V_L)) and produces a digital output signal being a series of digital pulses (fig. 1 (T_L)) wherein the duration of each pulse corresponds to the amount of time that the voltage signal had a voltage greater than the voltage threshold; a raw particle count generator (fig. 1 (30)) which receives the digital output signal from the comparator and produces a raw count of the number of particles; an average raw count generator (fig. 1 (30)) which receives the raw count of the number of particles from the raw particle count generator, and averages them thereby producing an average raw count (fig. 1 (Pa)); a megahertz clock (fig. 1 (22)) which produces a clock signal (fig. 1 (CP)); an AND gate (fig. 1 (24)) which receives the clock signal from the megahertz clock and

the digital output signal from the comparator and produces a digital output signal (fig. 3 (D_T)) comprising a series of digital pulses interspersed with periods devoid of said digital pulses; a raw wait-time counter (fig. 1 (43)) which receives the digital output signal from the AND gate determines a raw wait-time between adjacent series of pulses thereby producing a wait-time count (1-DWT/IT); a corrected average flight-time generator (fig. 1 (44)) which receives information based on said voltage signal from the preamp and produces a corrected average flight time (fig. 1 (RT_{PM}/IT)); and an average period count generator (fig. 1 (43) which receives: the average raw count (Pa) from the average raw count generator (fig. 1 (30)); an average wait-time (1-DWT/IT) from an average wait-time count generator (fig. 1 (43)); and a corrected average flight-time (RT_{PM}/IT) from the corrected average flight-time generator (fig. 1 (44)); and which employs the average raw count (Pa); an average wait-time (1-DWT/IT); and a corrected average flight time (RT_{PM}/IT) to produce an average period count (P). It should be noted that the average raw count generator uses an average of 1 to produce the average raw count. Also, the clock of Farrell et al. is assumed to be a megahertz clock since such frequencies would be appropriate for the present invention. Also, since the main logic circuit (43) in figure 1 performs the calculation of equation 3 (column 4, lines 10-18) it finds the wait-time count when it performs the (1-DWT/IT) calculation. Also, in figure 1, the divider (38) generates an average flight time (T_{PM}), which is then multiplied by (R) and divided by (IT) to generate the corrected average flight time (RT_{PM}/IT).

Farrell does not disclose a coincidence-corrected count generator which receives the average period count from the average period count generator and which also receives

an empirically determined correction factor, and then applies the empirically determined correction factor to the average period count, thereby determining a true count of the number of particles in the sample.

Berg et al. discloses a coincidence-corrected count generator (fig. 4 (28)) which receives the average period count from the average period count generator and which also receives an empirically determined correction factor, and then applies the empirically determined correction factor to the average period count, thereby determining a true count of the number of particles in the sample (column 13, line 43 – column 14 line 12).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to incorporate the coincidence count generator of Berg et al. into the particle counting apparatus of Farrell et al. for the purpose of making measurements without the need for dilution of the sample, thereby increasing the efficiency of the measurement procedure (column 14, lines 13-15).

Response to Arguments

11. Applicant's arguments filed December 26, 2002 have been fully considered but they are not persuasive.

12. In response to the Applicants argument that "Farrell '883 does not disclose either a "true average flight time" or a "true average wait time" as those terms are employed in pending claim 1" (page 9, lines 15-18). It should be noted that the terms "true average flight time" and "true average wait time" are not specifically defined in the claims themselves. Therefore, true average flight time and true average wait time are broadly interpreted. As shown in the rejection of claim

1, above, Farrell shows a true average flight time, which is simply an accurate measure of the total time during which signal pulses are above a low threshold detection level, and is the average of one run. Also, the specification of the current application states that the method of Farrell "...sets the corrected count equal to the inverse of the average wait time." (page 3, lines 6-7) and "...the average wait time derived by dividing the Total Wait Time by the raw count is a substantially reliable measurement." (page 3, lines 19-20). Therefore, Farrell similarly discloses a true average wait time for use in obtaining a corrected count of particles.

13. In response to Applicant's argument that there is no suggestion to combine the reference of Gohde et al. with Farrell et al., the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation is found, as stated in the rejection of claim 1, in Farrell et al., where it is stated that "an accurate correction of the apparent platelet count, Pa, has been determined to be readily achievable in accordance with the following equation 3:" (column 4, lines 6-18).

Similarly, with respect to the combination of Graham et al. with Farrell et al., motivation is found, as stated in the rejection of claim 11, in Graham et al., where it is stated that "pulse-editing circuitry responsive to particle coincidence may be desirable" (column 9, lines 47-50).

14. In response to Applicant's argument that "the coincidence error correction system of Jones '237 is not concerned with "true average wait time" or with "true average flight time" as those terms are employed in the pending claims (page 11, lines 8-10).

Firstly, it is noted that the feature upon which Applicant relies (i.e., "true average wait time") is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Secondly, it should be emphasized that "apparatus claims must be structurally distinguishable from the prior art." MPEP 2114. In *In re Danly*, 263 F. 2d 844, 847, 120 USPQ 528, 531 (CCPA 1959) it was held that apparatus claims must be distinguished from prior art in terms of **structure** rather than **function**. In *Hewlett-Packard Co v Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990), the court held that: "Apparatus claims cover what a device **is**, not what it **does**." (emphases in original). To emphasize the point further, the court added: "An invention need not **operate** differently than the prior art to be patentable, but need only **be** different" (emphases in original).

That is, in an apparatus claim, if a prior art structure discloses all of the **structural elements** in the claim, as well as their relative juxtaposition, then it **reads** on the claim, regardless of whether or not the **function** for which the prior art structure was intended is the same as that of the claimed invention.

Therefore, referring to apparatus claim 12, a **program for processing raw data** is claimed which has addition capabilities. It should be noted that according to the claim

rejections, Jones Jr. shows a program for processing raw data that has the capability to add two quantities (column 5, lines 38-43).

15. In response to Applicant's argument that it would not be obvious to combine the teachings of Jones Jr. with those of Gear since Gear is not desirous of any count correction, it should be noted that Gear states: "In order to obtain corrected counts, standard coincidence corrections were applied" (column 7, lines 33-35).

16. In response to the Applicants argument that "Berg '416 does not disclose the subject matter of pending claim 16" (page 19, lines 12-13), specifically referring to a coincidence corrected count generator, it should be noted that the step of applying coincidence correction (step 5) is carried out by a physical unit (28) (column 10, line 68 – column 11, line 7).

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to show the state of the art with respect to coincidence correction methods and apparatus.

USPN 6,275,290 to Cerni et al.: This patent shows a method for determining particle sizes.

USPN 5,247,461 to Berg et al.: This patent shows a method for coincidence correction.

USPN 4,303,337 to James et al.: This patent shows an apparatus for counting blood cells.

USPN 4,251,768 to Angel et al.: This patent shows a method for coincidence correction in an apparatus for measuring red blood cells.

USPN 4,110,604 to Haynes et al.: This patent shows a method and apparatus for measuring particle concentration and density.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Dole whose telephone number is 703-305-7396. The examiner can normally be reached on Mon. thru Fri. from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on 703-308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TJD
August 12, 2003

N. Le
Supervisory Patent Examiner
Technology Center 2800